

2017, Annual Georgia Sod Producers Inventory Survey

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In November, the Georgia Urban Ag. Council conducted their twenty-third consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2017. Twenty-one producers participated by online and telephone survey, representing farm sizes which were less than 300 acres (11 participants), 300 to 600 acres (5 participants), 601 to 900 acres (2 participants), and more than 900 acres (3 participants).

The survey obtained estimates of the inventory for bermudagrass, zoysiagrass, centipedegrass, St. Augustinegrass, and tall fescue based on estimated sales for the first five months of 2017 as excellent (more than 10% of demand), adequate (equal to demand), and poor (more than 10% shortage). Pricing information included farm price and price for truckload orders to the Atlanta area or within 100 miles of the farm, all costs were reported as price per square foot of sod.

Inventory Levels

Bermudagrass is being grown by 100% of the surveyed producers. Seventy-one percent of the producers rated their inventory as adequate to excellent this year, continuing a two-year increase in inventory (Figure 1). Eighty percent the growers with greater than 600 acres expect an adequate to excellent bermudagrass supply, while 69% of producers with 600 acres or less project having sufficient inventories. For early 2017, bermudagrass supply should meet market demand.

According to this year's survey, the number of producers growing zoysiagrass (76%) was a decrease over last year but is still relatively high. This is a species that continues to grow in popularity across the state and number of cultivars available to the consumer. There are at least

sixteen zoysiagrass cultivars being grown in Georgia. Of the producers responding, 81% estimate an adequate to excellent inventory, which is up from last year's estimate and is equal to 2013 levels (Figure 2).

Of the 21 producers surveyed 10 (48%) were growers of centipedegrass. Sixty percent of the growers had adequate to excellent inventory compared to 50% in 2016, and 33% in 2015. Of the larger growers, 2 of 3 growers with greater than 900 acres expect an adequate centipedegrass supply.

St. Augustinegrass is being grown by 4 of the 21 producers surveyed. Fifty percent reported a sufficient supply.

Similar to previous years, tall fescue was grown by 43% of producers. Seventy-eight percent of tall fescue producers reported excellent to adequate inventory, which continues a thirteen-year trend of sufficient tall fescue supply. The amount of tall fescue sod grown in Georgia meets demand.

Sod Prices

For 2017, the on-the-farm and delivered prices are expected to remain relatively unchanged or decrease compared to 2016. Price drops could range from 4% to 20% over last year's prices (Table 1). Figure 3 provides a five-year perspective of sod prices. Of the five species, only St. Augustinegrass is forecast to have a lower price than it did in 2015.

The average price per square foot for a truckload of bermudagrass delivered to the Atlanta area, or within 100 miles of the farm, is expected to fall 7% (Table 1). The 2017 survey indicated prices varied from 19.0 cents to 40.0 cents, with an average price of 29.6 cents (Table 2). The average price in 2016 was 31.7 cents per square foot and ranged from 25.0 cents to 41.0 cents.

The 2017 average price for a delivered truckload of zoysiagrass decreased from 2016 levels. The average price of delivered zoysiagrass in 2017 was 47.3 cents and ranged from 36.0

to 59.0 cents. In 2016 zoysiagrass prices ranged from 35.0 to 57.0 cents and averaged 49.4 cents.

Centipedegrass prices fell too. Prices in 2017 ranged from 24.0 cents to 36.0 cents and averaged 30.1 cents, compared to 2016 when the average delivered price was 33.9 cents and ranged from 30.0 to 38.0 cents.

Although the 2017 average delivered price for tall fescue (35.1 cents) was unchanged from last year (34.9 cents), both the low- and high-end prices were greater than 2016. This year, prices ranged from 27.0 cents to 43.0 cents.

The price of delivered St. Augustinegrass decreased in 2017. The average price of delivered St. Augustinegrass in 2017 was 36.5 cents and ranged from 35.0 to 38.0 cents. In 2016, St. Augustinegrass prices ranged from 38.0 to 55.0 cents and averaged 45.3 cents. This past year, one relatively large producer announced they were discontinuing production of St. Augustinegrass. It is unknown what a drop in inventory will do to St. Augustinegrass prices in 2017.

Regarding grower price expectations, most growers (95%) are not forecasting a price decrease in 2017. Twenty-four percent of bermudagrass producers expect rising prices during the first five months of 2017. This is a decrease from the previous three years where greater than 50% of the growers expected prices higher than what they reported for this survey. For zoysiagrass, 74% of producers anticipate stable prices during the first five months of 2017; 27% of producers forecast higher prices. For centipedegrass and tall fescue, nearly 50% of all producers expect prices to remain constant in 2017. Sixty-seven percent of St. Augustinegrass producers expect constant prices.

Certification

2017 had 15 producers representing 71% of the respondents with some certified grass on their farm (Table 3). Eighty-five percent of these growers charge a premium for certified grass.

The remaining growers either do not place an added value on certified sod or do not participate in the certification program. In 2017, the typical extra cost ranged from 2.0 to 10.0 cents per square foot and averaged 4.0 cents. This translates to between \$10.00 and \$50.00 on a 500 square foot pallet. The 2017 low and high end of the range increased dramatically over last year (1.0 to 7.0 cents). The price point where consumers (i.e. industry practitioners and homeowners) value varietal purity is unknown. But a two-year consecutive average of 4.0 cents per square foot may indicate it is near \$20 per 500 square foot pallet.

Freight and Unloading Fees

Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, fell in 2017 (Table 4). Costs ranged from \$1.25 to \$5.00 and averaged \$3.50, from the last two year's average fee. A separate freight rate is charged by 48% of the respondents.

Four respondents (19%) reported charging an unloading fee in 2017, down from 2016. The minimum unloading fee (\$75) rose from 2016 with producers now charging between \$75 and \$150. Most producers (95%) will make additional drops on a load. The low-end charge was down to \$25 in 2017, compared to \$35 in 2016. The high-end charge increased from \$75 in 2016 to \$250 in 2017. The average cost for additional drops in 2017 was \$76.19; an increase from last year's cost of \$63.50.

Fuel Surcharge

No respondent reported adding a fuel surcharge to a load in 2017. Figure 4 compares the average sod price for all species grown with the average annual retail price for gasoline and diesel fuel. For two consecutive years sod prices have outpaced fuel prices.

This survey was conducted prior to OPEC members agreeing to reduce oil production by 1.2 million barrels a day starting January 1, 2017. There is wide speculation as to what this will do to fuel prices in the U.S., but if prices increase dramatically, fuel surcharges could return to the

cost of delivering sod.

Markets

The 21 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (Table 5). This industry segment continues to be the perennial leader. In 2016, sports / athletic fields moved into the second position and remain there this year. The groups that gained in rank for 2017 were garden centers and homeowners. This could indicate a shift of sod consumers to the “DIYs” and an interest in upgrading home landscapes.

Acreage in Production

Sixty-three percent of the growers indicated they plan to add acres in 2017. The volume of new grass potentially being added to production fields ranged from 10 acres to 200 acres with a total of 340 acres potentially being added this coming growing season. This is a decrease from 2016 which forecast greater than 700 acres being added to production.

Summary

From this survey it appears that prices for all species will hold steady and possibly decrease relative to last year. Similarly, inventory for all warm-season species is expected to meet market demand during the first part of 2017.

However, as a result of previous sod inventory and pricing reports, drought has shown to impact sod inventory and price, inventory generally declines and prices subsequently rise. During the growing season (May through October) of 2016, the cumulative rainfall total within the primary sod production areas was lower than for 2015 and 2014 (Figure 5).

Mid-September through October is an optimum time for fields to regenerate and make significant growth toward the next season’s crop. During this period in 2016 rainfall totals in central (FVSU), southern (Tifton), and northern (Calhoun) Georgia were 0.03, 0.19, and 1.07 inches respectively. With the Calhoun site receiving no measurable rainfall during the month of October. Couple minimal rainfall that recharges irrigation reserves with higher temperatures

during the primary growing season and it is foreseeable that grass growth was delayed resulting in sod inventories mid- to late-2017 potentially being tight.

If projects are planned for 2017 where sod will be needed, it would be prudent to get price quotes regularly. Not all producers will “book” or presale grass at a locked price, but if they will, contacting them early may help ensure availability and the best price. Also, 2017 may be a year to encourage grassing projects to occur from mid-spring through early summer. It’s unclear what impact the 2016 dry fall may have on production.

Table 1. Change in prices from spring 2016 to 2017.

Turfgrasses	On-the-farm			Delivered*		
	2016	2017	% Change	2016	2017	% Change
	----- Cents / ft ² -----			----- Cents / ft ² -----		
Bermudagrass	25.5	24.5	-3.9	31.7	29.6	-6.6
Zoysiagrass	42.6	42.5	-0.2	49.4	47.3	-4.3
Centipedegrass	26.9	25.1	-6.7	33.9	30.1	-11.2
Tall Fescue	29.3	29.2	-0.3	34.9	35.1	0.6
St. Augustinegrass	39.3	32.5	-17.3	45.3	36.5	-19.4

* Delivered price includes freight and pallets. The delivered price included the Atlanta area or within 100 miles of the farm.

Table 2. Comparison of on-the-farm prices with delivered prices, 2017.

Turfgrasses	On-the-farm		Delivered*	
	Price (avg.)	Range	Price (avg.)	Range
	----- Cents / ft ² -----			
Bermudagrass	24.5	16.0 – 32.0	29.6	19.0 – 40.0
Zoysiagrass	42.5	32.0 – 55.0	47.3	36.0 – 59.0
Centipedegrass	25.1	21.0 – 32.0	30.1	24.0 – 36.0
Tall Fescue	29.2	23.0 – 35.0	35.1	27.0 – 43.0
St. Augustinegrass	32.5	30.0 – 35.0	36.5	35.0 – 38.0

* Delivered price includes freight and pallets. The delivered price included the Atlanta area or within 100 miles of the farm.

Table 3. Percentage of survey respondents that grow certified grass and the additional charge for certified grass.

Year	Growers with Certified Grass		Growers that charge a premium for Certified Grass			
	%	n*	%	n*	Average	Range
					----- cents -----	
2017	71	15	85	11	4.0	2.0 – 10.0
2016	88	15	87	13	4.0	1.0 – 7.0
2015	76	19	55	11	3.0	1.0 – 6.0
2014	54	19	47	9	2.0	2.0 – 3.0
2013	57	24	54	13	3.0	1.0 – 10.0

* Total number of respondents 21, 17, 26, 35, and 42 for 2017, 2016, 2015, 2014, and 2013 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	Range	Average	% Change
	----- \$ / mile -----		
2017	1.25 – 5.00	3.50	-5.4
2016	3.00 – 4.50	3.70	-1.1
2015	1.00 – 5.86	3.74	16.9
2014	1.00 – 5.50	3.20	0.3
2013	1.00 – 6.00	3.19	7.8

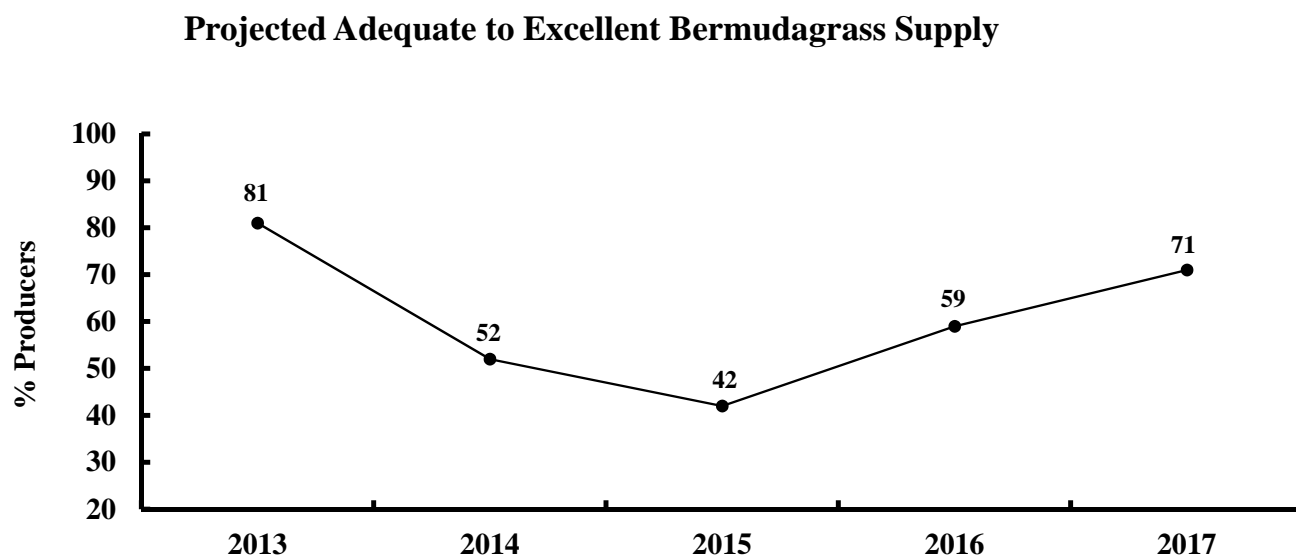
* Delivered price includes freight and pallets. The delivered price included the Atlanta area or within 100 miles of the farm.

Table 5. Ranking of industry segments for sale of turfgrass.

Industry segments	2017		2016	
	Rank	Average[*]	Rank	Average[*]
Landscape Contractors	1	49.0	1	43.1
Sports / Athletic Fields	2	23.0	2	18.9
Garden Centers	3	17.0	6	12.2
Golf Courses	4	15.3	4	14.7
Homeowners	5	13.1	7	11.4
Existing Developers	6	13.0	5	12.7
Brokers	7	10.9	3	15.5
Landscape Designers	8	5.0	8	10.5

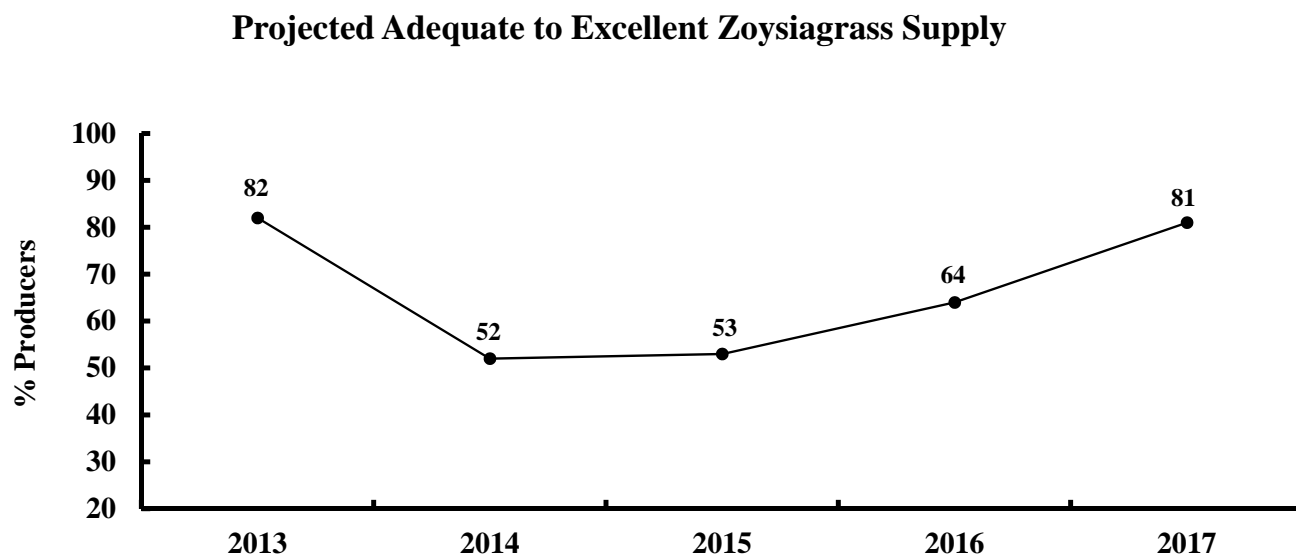
^{*} Average percentage of total sales.

Figure 1. Percentage of bermudagrass producers projecting adequate to excellent supply for the past five years.



* Projected supply for the first 5 months of the calendar year.

Figure 2. Percentage of zoysiagrass producers projecting adequate to excellent supply for the past five years.



* Projected supply for the first 5 months of the calendar year.

Figure 3. Historical perspective of sod prices in Georgia, 2013 to 2017.

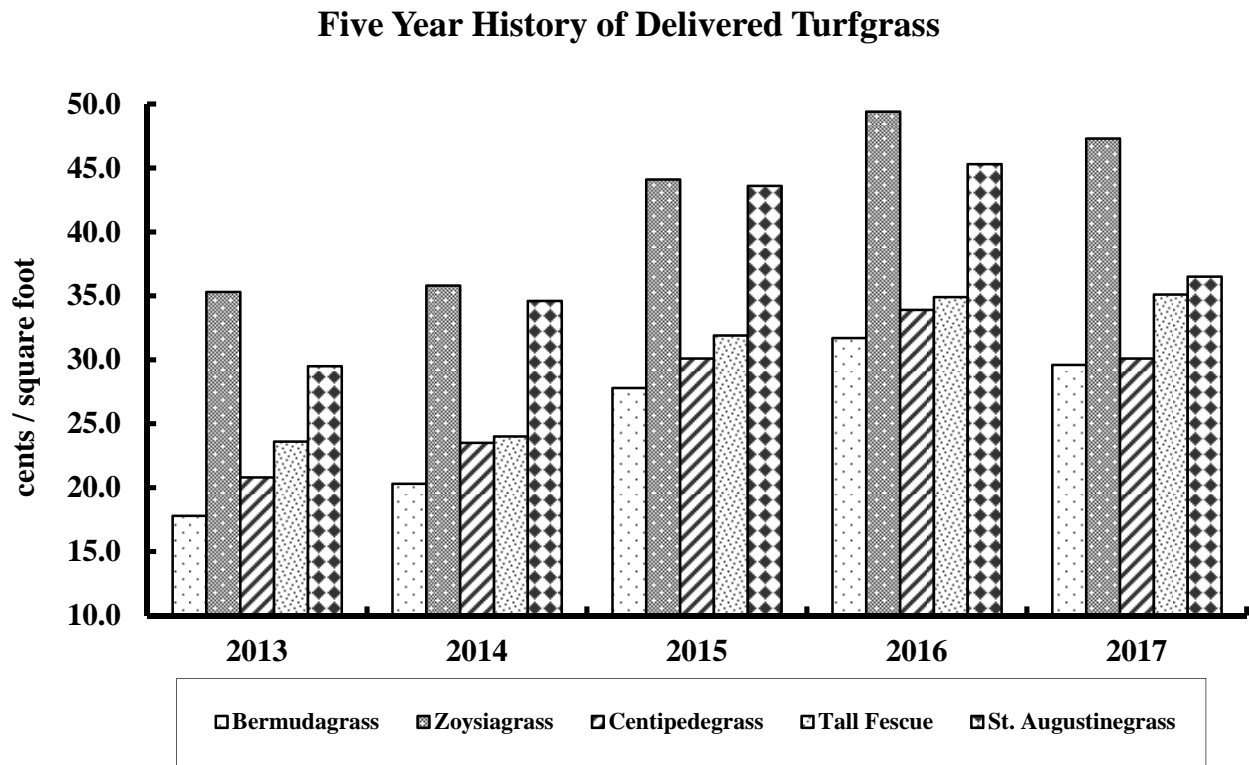
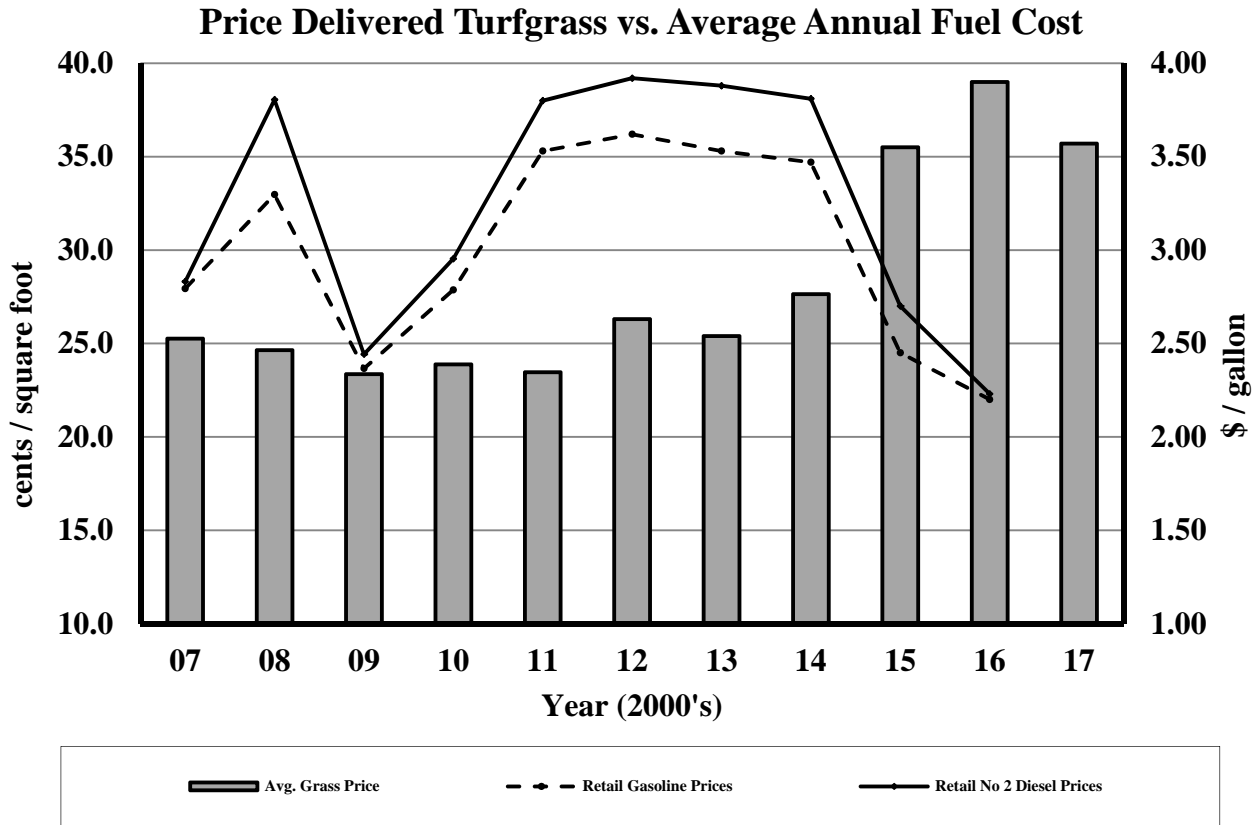
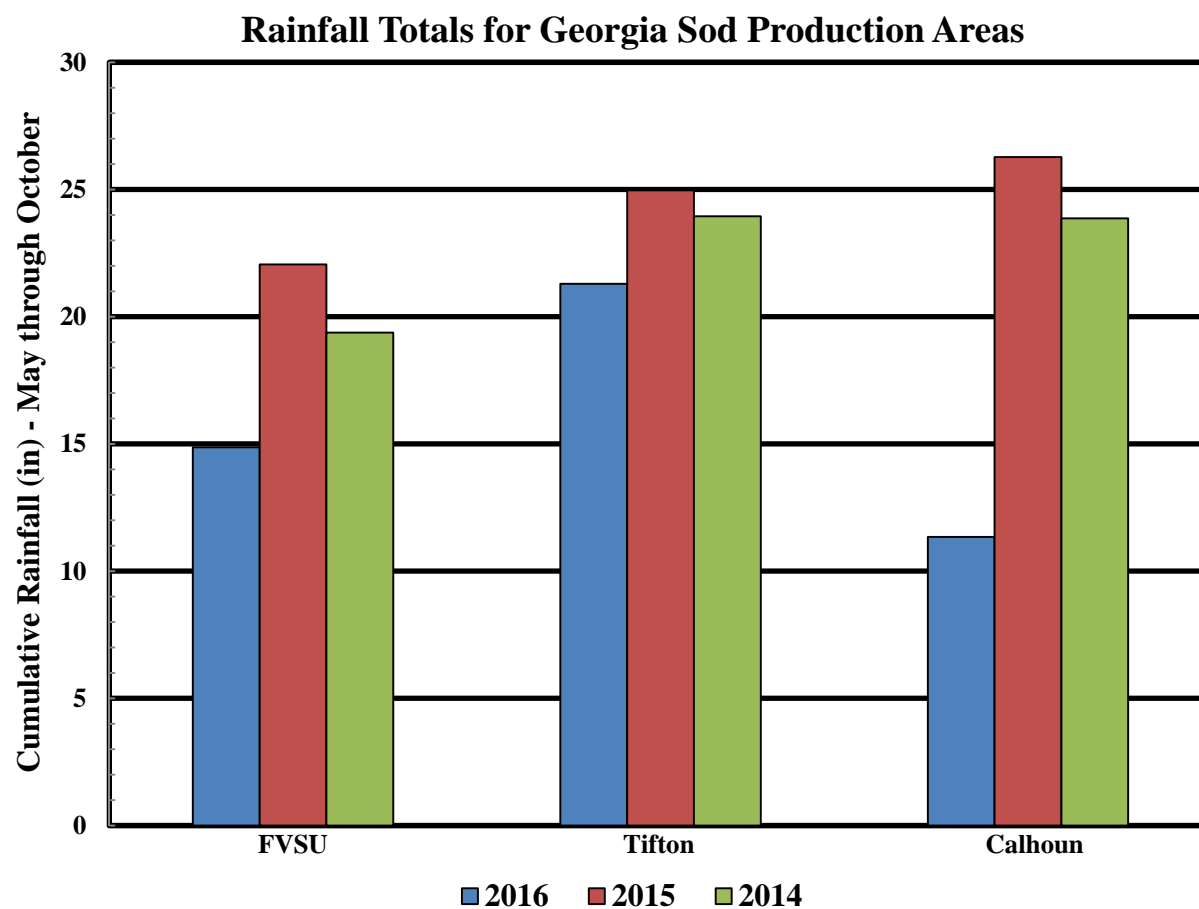


Figure 4. Ten year comparison of average sod price with fuel cost.



* Average grass price was calculated for the five turfgrass species commonly grown in Georgia.
 ** Average annual retail fuel cost for the Lower Atlantic region was found at www.eia.doe.gov.
 For 2016, the average retail fuel cost was calculated through December 12.

Figure 5. Rainfall totals through the primary growing season for three of Georgia's sod production areas.



* Data from The Georgia Automated Environmental Monitoring Network (www.GeorgiaWeather.net).

** Weather station sites are; FVSU = Fort Valley State University, Tifton = Coastal Plain Experiment Station, and Calhoun = Northwest Georgia Research and Education Center.

Bullet Points from the 2017 Sod Producers Inventory Survey

1. Supply of warm-season turfgrasses looks to be sufficient for early 2017.
2. 2017 continues a 2-year increase in bermudagrass and zoysiagrass inventory.
3. The delivered price for all grasses is expected to be lower in 2017 than 2016.
4. Most growers are not forecasting a price decrease later into 2017.
5. For 2 consecutive years, certified grass has averaged a premium of 4.0 cents per square foot.
6. Paying more for certified grasses provides the end-consumer assurance they are receiving varietal purity.
7. Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, declined.
8. A fuel surcharge has become an uncommon delivery expense.
9. More turfgrass acreage will come into production in 2017.
10. The primary markets for Georgia sod are landscape contractors and sports fields.
11. Get price quotes regularly.
12. If possible “book” or lock prices to ensure availability and price.